

**ACHARYA N.G. RANGA AGRICULTURAL UNIVERSITY**

From  
Principal Scientist (Ento) & Head,  
Sugarcane Research Station,  
VUYYURU - 521 165, A.P.

To  
Dr. O. K. Sinha,  
Project Coordinator (S),  
All India Coordinated Research Project on  
sugarcane,  
IISR, Lucknow – 226 002, U.P.

**Lr. No. A1 / 1 / AICRP / 2016, dt. 24-05-2016**

Sir,

- Sub : Submission of Annual Report (2015-16) of AICRP on sugarcane, Dept. of Genetics and Plant Breeding, Sugarcane Research Station, Vuyyuru – Reg.
- Ref : 1. F. No. 17 – 33 / 2016- PCS, dt. 20-05-2016 of the Project Co-ordinator (Sugarcane), AICRP(Sugarcane), IISR, Lucknow – 226002.  
2. e-mail dt. 26-04-2016 of the Director & Principal Investigator, Crop Improvement – AICRP (S), SBI, Coimbatore-641 007.

\* \* \*

I submit to enclose here with Annual Report (2015-16) of AICRP on Sugarcane pertaining to Division of Genetics and Plant Breeding, Sugarcane Research Station, Vuyyuru. I further submit that data sheets with RBD analysis, information on progress made from 2003 onwards, weather report and details of fluff sown in Seedling Nursery (2016-17) are also enclosed here for kind perusal.

Yours faithfully,

PRINCIPAL SCIENTIST (Ento.) & HEAD  
SUGARCANE RESEARCH STATION  
VUYYURU - 521 165

Copy submitted to the Director & Principal Investigator, Crop Improvement – AICRP (S), SBI, Coimbatore for kind perusal.

## ACHARYA N.G. RANGA AGRICULTURAL UNIVERSITY

From  
Principal Scientist (Ento.) & Head,  
Sugarcane Research Station,  
VUYYURU - 521 165, A.P.

To  
The Director & Principal Investigator,  
Crop Improvement – AICRP (S),  
SBI, Coimbatore-641 007.

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Yours faithfully,

PRINCIPAL SCIENTIST (Ento.) & HEAD  
SUGARCANE RESEARCH STATION  
VUYYURU - 521 165

Copy submitted to the Project Co-ordinator (Sugarcane), AICRP (Sugarcane), IISR, Lucknow – 226 002 for kind perusal

**Table: Meteorological data, S.R.S., Vuyyuru – 521 165, Krishna dt., A.P.**

Months	Temperature		R.H		Rain fall in mm.	No. of Rainy days	Sum Shine Hours
	Max	Mini	F.M.	A.M			
January – 2015	30.1	16.5	88.0	52.0	Nil	Nil	8.2
February – 2015	32.0	19.5	94.0	49.0	Nil	Nil	8.6
March – 2015	35.2	21.9	90.0	45.0	9.0	1	7.3
April – 2015	36.2	23.7	83.0	47.0	16.0	1	7.9
May – 2015	40.6	26.0	80.0	45.0	11.2	1	9.2
June – 2015	34.1	23.8	86.0	62.0	260.4	13	3.5
July – 2015	37.3	24.1	79.0	49.0	80.2	7	4.2
August – 2015	34.6	24.0	89.0	60.0	154.8	12	7.4
September -2015	35.7	23.8	90.0	64.0	177.2	9.0	4.7
October – 2015	34.4	24.4	88.0	61.0	35.4	3.0	5.9
November -2015	30.7	21.2	87.0	62.0	103.0	5.0	5.7
December - 2015	30.6	21.0	87.0	55.0	Nil	Nil	6.4
January – 2016	31.1	18.5	89.0	48.0	Nil	Nil	5.9
February - 2016	33.5	19.1	18.4	48.0	Nil	Nil	7.8
March – 2016	36.7	22.7	90.0	44.0	Nil	Nil	8.0
April – 2016	39.5	25.0	79.0	41.0	Nil	Nil	8.3

**Table : Progress made from 2003 on wards (Sugarcane Research Station, Vuyyuru)**

Year	No. of clones selected in				
	Seedling nursery	Settling nursery	Selection nursery	Preliminary Yield Trial	
2003-04	126 (2004 V 1 to 126)	48 (2003 V...)	40 (2002 V...)	-	
2004-05	208 (2005 V 1 to 208)	40 (2004 V...)	16 (2003 V...)	13 (2002 V...)	Early (6) Mid late (7)
2005-06	135 (2006 V 1 to 135)	58 (2005 V...)	16 (2004 V...)	10 (2003 V...)	Early (7) Mid late (3)
2006-07	136(2007 V 1 to 136)	49 (2006 V...)	23 (2005 V...)	9 (2004 V...)	Early (5) Mid late (4)
2007-08	398 (2008 V 1 to 398)	50 (2007 V...)	20 (2006 V...)	12 (2005 V...)	Early (6) Mid late (6)
2008-09	152 (2009 V 1 to 152)	126 (2008 V...)	22 (2007 V ...)	12 (2006 V...)	Early (6) Mid late (6)
2009-10	162 (2010 V 1 to 162)	54 (2009 V...)	36 (2008 V ...)	12 (2007 V...)	Early (6) Mid late (6)
2010-11	283 (2011 V 1 to 283)	54 (2010 V...)	27 (2009 V...)	21 (2008 V...)	Early (11) Mid late (10)
2011-12	166 (2012 V 1 to 166)	49 (2011 V...)	28 (2010 V...)	12 (2009 V ...)	Early (6) Mid late (6)
2012-13	133 (2013 V 1 to 133)	42 (2012 V ...)	22 (2011 V ...)	16 (2010 V ...)	Early (10) Mid late (6)
2013-14	97 (2014 V 1 to 97)	44 (2013 V...)	19 (2012 V...)	14 (2011 V ...)	Early (10) Mid late (4)
2014-15	180 (2015 V 1 to 180)	35 (2014 V...)	20 (2013 V...)	12 (2012 V...)	Early (11) Mid late (1)
2015-16	253 (2016 V 1 to 253)	Clones in Settling nursery, Selection nursery and PYT (Plant) crops of 2015-16 season were damaged due to fire accident on 07-03-2016 and clones could not be promoted and planted for 2016-17 season. The trials were ratooned.			

## **Annual report of Sugarcane Breeding (AICRP on Sugarcane ), S.R.S., Vuyyuru for the year 2015-16**

1. Project No : II(a)
2. Code No : P1-2015 / 2- AHD / F30 / 0230
3. Name of the project : Evolving improved sugarcane genotypes suitable for different Agro-climatic zones of Andhra Pradesh – Seedling Nursery
4. Site of the Experiment : Sugarcane Research Station, Vuyyuru.
5. Project Leader and her associates : 1. Dr. V.Satya Priya Lalitha, Pr.Scientist (Pl.Br)
6. Objective : To identify potential genotypes from the seedlings raised from true seed to process through various selection stages.
7. Date of initiation : Recurring feature with new set of crosses every year.
8. Results if any, achieved so far : In Seedling nursery (2014-15), a total of 1427.5 g of fluff from 26 Station Crosses, 11 Zonal crosses, 16 GCs and 12 PCs was sown out of which 10,007 seedlings were obtained. 6,660 seedlings were survived in the main field with an average survival per cent of 66.55 and an average of 7.01 seedlings were obtained per gram of fluff sown. Out of 6,660 seedlings survived 180 seedlings were selected based on H.R.-Brix and other morphological characters and promoted to Settling nursery (2015-16). Maximum number of selections were obtained in 97 R 401 X Co 8213 (22) followed by Co C 671 X Co 94008 (14) and 81 V 48 X ISH 69 (13). Higher H.R.- Brix value of 26.8 was recorded by 2015 V 139 followed by 2015 V 143 (26.3), 161 (26.2), 151 (25.8), 71 (25.6), and 8 and 116 (25.0). Higher number of millable canes were recorded by 2015 V 50 (12) followed by 2015 V 75 and 172 (11) and 12, 35, 73 and 87 (10). Higher clump weight of 20.0 kg was recorded by 2015 V 172 followed by 35 (19.0) 49, 53, 73, 83, 114 (17.0), 48 (16.0), 50, 74 (15.0) and 45, 82, 85 and 87 (14.0).
9. Techniques adopted :
  - a) Treatments : 12,133 seedlings from 31 Station Crosses, 13 Zonal Crosses, 18 GCs and 13 PCs
  - Standards : Co 6907 and Co7219
  - b) Design } A.R.C.B.D
  - c) Replications }

- d) Spacing : 80X40cm in furrows of 10m length to accommodate 25 seedlings per furrow.
- e) Date of Sowing Nursery : 12,13 - 05 -15
- f) Date of Transplanting : 21,22 - 05 -15
- g) Fertilizers : 75kg P<sub>2</sub>O<sub>5</sub> + 100 kg K<sub>2</sub>O/ha as basal. Nitrogen @ 168 kg/ha in the form of urea in two splits 30% at 10 DAT and 70% at 60 days after transplanting.
- h) Irrigations : Once in a week during formative phase till the break of monsoon, as and when necessary during monsoon and once in 21 days during maturity phase from November till harvest.
- i) Date of Harvesting : 06,11 -04 -2016

10. Data analysed : In Seedling nursery (2015-16), a total of 1836 g of fluff from 31 Station Crosses, 13 Zonal Crosses, 18 GCs and 13 PCs was sown out of which 12,133 seedlings were obtained. 6,291 seedlings were survived in the main field with an average survival per cent of 51.85 and an average of 6.61 seedlings were obtained per gram of fluff sown. 253 seedlings (2016 V 1 to 2016 V 253) were selected based on H.R. Brix and other morphological characters and planted in Settling nursery (2016-17). Maximum number of selections were made in the crosses *viz.*, Co V 89101 X Co 62198 (27), 69 A 591 x Co 62198 (16), Co 99006 X Co 62198 (13) and Co 0240 X Co 775 (11). The selections *viz.*, 2016 V 144 (26.65), 2016 V 147 (26.55), 2016 V 119 (26.30), 2016 V 134 (25.80) and 2016 V 151 (25.60) recorded higher H.R.- Brix values. Higher number of canes per clump were recorded by 2016 V 47 (14), 2016 V 228, V 245 and V 251 (13), 2016 V 38, V 71, V 86 and V 171 (12) and 2016 V 116, V 201 and V 233 (11) while 2016 V 233 (14.5 kg), 2016 V 171 (14.0 kg), 2016 V 40 (13.0 kg) and 2016 V 47, V 71, V 221, V 228 and V 251(12.0 kg) recorded higher clump weight. The selections *viz.*, 2016 V 225 (299.2 cm), 2016 V 97 (278.3 cm), 2016 V 90 (266.7 cm) and 2016 V 34 (260.0 cm) recorded higher length of millable cane where as 2016 V 75 (3.24 cm), 2016 V 244 (3.21 cm), 2016 V 143 (3.19 cm), 2016 V 96 (3.14 cm), 2016 V 123 (3.13 cm) and 2016 V 58 (3.12 cm) recorded higher diameter of millable cane.

11. Summary of results : Out of 12,133 seedlings obtained, 6,291 seedlings were survived in the main field with an average survival per cent of 51.85 and an average of 6.61 seedlings were obtained per gram of fluff sown. 253 seedlings (2016 V 1 to 2016 V 253) were selected based on H.R. Brix and other morphological characters and planted in Settling nursery (2016-17).

12. Results that can be transferred to the farmers :  
This is the preliminary stage of evaluation of genotypes and needs further testing.

1. Project No : II (b)
2. Code No : P1 - 2015 / 3 - AHD / F30 / 0230
3. Name of the project : Evolving improved sugarcane genotypes suitable for different agro-climatic zones of

Andhra Pradesh – Settling Nursery (C<sub>1</sub>).

4. Site of the Experiment : Sugarcane Research Station, Vuyyuru.
5. Project Leader and his associates : 1.Dr. V.Satya Priya Lalitha, Pr.Scientist (Pl.Br)  
2. Dr.V. Raja Bapa Rao, Pr. Scientist (Pl. Br.)
6. Objective : To identify promising genotypes for further testing in Selection Nursery.
7. Date of initiation : Recurring feature with new set of clones every year.
8. Results if any, achieved so far : In Settling nursery (2014-15), out of 97 clones (2014 V...) studied along with two standards, Co 6907 and Co 7219, 35 clones were selected based on H.R.-Brix and other morphological characters and promoted to Selection nursery (2015-16). The clones viz., 2014 V 38 (1,45,000/ha), 2014 V 84 (1,20,000/ha) and 2014 V 21 (1,12,500/ha) recorded higher stalk population while the standards Co 6907 and Co 7219 recorded stalk population of (80,000/ha) and (85,000/ha), respectively. The clone 2014 V 21 recorded higher cane yield of 136.25 t/ha followed by 2014 V 45 and 84 (135.00 t/ha). The clone 2014 V 11 recorded higher H.R.-Brix value of 24.3 while the clones 2014 V 35 (29.64 t/ha) and 2014 V 81 (29.38 t/ha) recorded higher brix yield.
9. Techniques adopted :
- a) Treatments : 180 selected clones (2015 V...) from Seedling nursery of 2014-15 season.
  - Standards : Co 6907 and Co7219.
  - b) Design } A.R.C.B.D.
  - c) Replications }
  - d) Spacing : 80cm between rows.
  - e) Plot size : 2.5 M x 2 R x 0.8 M = 4.0 Sq.m.
  - f) Seed rate : Four three budded setts / metre
  - g) Date of Planting : 04,05,06-04-15
  - h) Fertilizers : 168kg N/ha in two equal doses at 45 and 90 days after planting. 75kg P<sub>2</sub>O<sub>5</sub> and 100kg K<sub>2</sub>O/ha as basal dose.
  - f) Irrigations : Once in a week during formative phase till the break of monsoon, as and when necessary during monsoon and once in 21 days during maturity phase from November till harvest.
  - g) Date of Harvesting : 08,09,10-03-2016
10. Data analysed : In Settling nursery (2015-16), out of 180 clones (2015 V...) studied along with two standards, Co 6907 and Co 7219, the clones 2015 V 38 (26.1), 2015 V 63 and 71 (25.6), 2015 V 37 (25.4) and 2015 V 31 (25.2) recorded higher H.R.- Brix values.

The clones *viz.*, 2015 V 76 (1,45,000/ha), 2015 V 154 and 2015 V 159 (1,35,000/ha) and 2015 V 31 and 2015 V 101 (1,25,000/ha) recorded higher stalk population while the standards Co 6907 and Co 7219 recorded stalk population of 1,20,833/ha and 64,167/ha, respectively. Clones in Settling nursery of 2015-16 season were damaged due to fire accident on 07-03-2016 and clones could not be promoted and planted in Selection nursery (2016-17). The trial was ratooned.

11. Summary of results : Out of 180 clones studied, the clones 2015 V 38 (26.1), 2015 V 63 and 71 (25.6), 2015 V 37 (25.4) and 2015 V 31 (25.2) recorded higher H.R.- Brix values.

12. Results that can be transferred to the farmers :  
This is the preliminary stage of evaluation of genotypes and needs further testing.

1. Project No : II (c)
2. Code No : P1 - 2015 / 4 - AHD / F30 / 0230.
3. Name of the project : Evolving improved sugarcane genotypes suitable for different agro-climatic zones of Andhra Pradesh – Selection Nursery (C<sub>2</sub>).
4. Site of the Experiment : Sugarcane Research Station, Vuyyuru.
5. Project Leader and his associates : 1. Dr. V.Satya Priya Lalitha, Pr.Scientist (Pl.Br)
6. Objective : To identify promising genotypes for further testing in Preliminary yield trial.
7. Date of initiation : Recurring feature with new set of clones every year.
8. Results if any, achieved so far : In Selection nursery (2014-15), out of 44 clones studied along with two standards Co 6907 and Co 7219, twenty clones were selected and planted in Preliminary Yield Trial (2015-16). The clone 2013 V 37 (95,000/ha) and 2013 V 21 (94,375/ha) recorded higher number of millable canes. Eleven clones recorded higher (>19.0%) per cent juice sucrose values at 10<sup>th</sup> month *viz.*, 2013 V 126 (20.97), 2013 V 131 (20.50), 2013 V 27 (19.92), 2013 V 130 (19.87), 2013 V 75, 120 (19.71), 2013 V 102 (19.66), 2013 V 118 (19.52), 2013 V 37 (19.50), 2013 V 70 (19.27) and 2013 V 13 (19.04) while the clones 2013 V 46 (21.02), 2013 V 122 (20.76), 2013 V 70 (20.80), 2013 V 130 (20.60), 2013 V 27 (20.37) and 2013 V 92 (20.09) recorded higher per cent juice sucrose values at 12<sup>th</sup> month. The clones 2013 V 37 (128.75t/ha), 2013 V 21 (123.13 t/ha) and 2013 V 46 (120.63 t/ha) recorded higher cane yield.

9. Techniques adopted :
- a) Treatments : 35 selected clones (2014 V...) from Settling Nursery of 2014-15 season.
  - Standards : Co 6907 and Co7219.
  - b) Design } A.R.C.B.D.
  - c) Replications }
  - d) Spacing : 80cm between rows.
  - e) Plot size : 5 M x 2 R x 0.8 M = 16.0 Sq.m.
  - f) Seed rate : Four three budded setts/metre.
  - g) Date of Planting : 30-03-15
  - h) Fertilizers : 168kg N/ha in two equal doses at 45 and 90 days after planting. 75kg P<sub>2</sub>O<sub>5</sub> and 100kg K<sub>2</sub>O/ha as basal dose.
  - i) Irrigations : Once in a week during formative phase till the break of monsoon, as and when necessary during monsoon and once in 21 days during maturity phase from November till harvest.
  - j) Date of Harvesting : 08,09,10-03-2016

10. Data analysed : In Selection nursery (2015-16), 35 clones were studied along with two standards Co 6907 and Co 7219. The clone 2014 V 31 recorded higher per cent juice sucrose value of 18.32 at 10<sup>th</sup> month. The clones 2014 V 3 (1,20,000/ha), 2014 V 84 (1,19,325/ha), 2014 V 45 (1,13,750/ha) and 2014 V 38 (1,12,500/ha) recorded more than one lakh millable canes while the standards Co 7219 and Co 6907 recorded stalk population of 1,25,417/ha and 1,06,875/ha, respectively. Clones in Selection nursery of 2015-16 season were damaged due to fire accident on 07-03-2016 and clones could not be promoted and planted in Preliminary Yield Trial – Plant crop (2016-17). The trial was ratooned.

11. Summary of results :  
Out of 35 clones studied, the clone 2014 V 31 recorded higher per cent juice sucrose value of 18.32 at 10<sup>th</sup> month.

12. Results that can be transferred to the farmers :  
This is the preliminary stage of evaluation of genotypes and needs further testing.

- 1. Project No : IV (a)
- 2. Code No : P1 - 2015 / 13 - AHD / F30 / 0230.
- 3. Name of the project : Initial Varietal Trial (Early)
- 4. Site of the Experiment : Sugarcane Research Station, Vuyyuru.
- 5. Project Leader and his associates : Dr. V. Satya Priya Lalitha, Pr.Scientist (Pl.Br.)

6. Objective : To screen and select high yielding and sucrose rich clones suitable for East - Coast zone.
7. Date of initiation : 1990
8. Results if any achieved so far : In Initial Varietal Trial (Early) (2014-15), standard Co C 01-061 recorded higher per cent juice sucrose value of 17.37. The clone Co A 12-321 recorded higher cane yield of 105.56 t/ha. The clone Co A 12-323 recorded higher CCS yield of 12.93 t/ha.
9. Techniques adopted :
- a) Treatments : 8 ( Co A 13-321, Co A 13-322, Co A 13-323, Co A 13-324, Co C 13-336, Co C 13-337, Co C 13-338, Co V 13-356 (2006 V 41))
- Standards : 3 (Co C 01-061, Co A 92081(87 A 298), Co 6907)
- b) Design : Randomized Block Design.
- c) Replications : Three
- d) Spacing : 90 cm between rows.
- e) Plot size : Gross : 6 R x 6 M x 0.9 M = 32.4 Sq.m  
Net : 4 R x 6 M x 0.9 M = 21.6 Sq.m
- f) Seed rate : Four three budded setts/metre.
- g) Date of Planting : 12 -01 -15
- h) Fertilizers : 168kg N/ha in two splits at 45 and 90 days after planting. 75 kg P<sub>2</sub>O<sub>5</sub> + 100 kg k<sub>2</sub>O/ha as basal dose.
- i) Irrigations : Once in a week till the break of monsoon, as and when necessary during the monsoon and once in 21 days during maturity phase from November till harvest.
- j) Date of Harvesting : 10 -02 -2016
10. Data analysed : In Initial Varietal Trial (Early) (2015-16), the clones Co A 13-324 (18.25) and Co V 13-356 (18.03) recorded higher per cent juice sucrose values while the standard Co C 01-061 recorded 17.99 per cent juice sucrose. The standard Co C 01-061 recorded higher stalk population of 89,661/ha. The clone Co C 13-336 recorded higher Cane (110.80 t/ha) and CCS (12.77 t/ha) yields while the standard Co 6907 recorded higher cane yield (100.46 t/ha) among the standards and another standard Co C 01-061 recorded higher CCS yield (10.75 t/ha).
11. Summary of results : The clone Co C 13-336 recorded higher Cane (110.80 t/ha) and CCS (12.77 t/ha) yields.
12. Results that can be transferred to the farmers :  
The promising varieties need to be tested in the farmers' fields.

1. Project No : IV (b)
2. Code No : P1 - 2014 / 14 - AHD / F30 / 0230.
3. Name of the project : Advanced Varietal Trial (Early) – First Plant
4. Site of the Experiment : Sugarcane Research Station, Vuyyuru.
5. Project Leader and his associates : Dr. V. Satya Priya Lalitha, Pr.Scientist (Pl.Br.)
6. Objective : To screen and select high yielding and sucrose rich clones suitable for East - Coast zone.
7. Date of initiation : 1990
8. Results if any achieved so far : In Advanced Varietal Trial (Early) – I plant (2014-15), the standard Co C 01-061 recorded higher per cent juice sucrose of 16.79. The clones Co C 10-336 (103.01 t/ha) and Co C 11-336 (102.78 t/ha) recorded higher cane yield. The standard Co C 01-061 recorded higher CCS yield of 11.28 t/ha.
9. Techniques adopted :
  - a) Treatments : 5 ( Co A 12-321, Co A 12-322, Co A 12-323, Co Or 12-346, Co V 12-356 (2006 V 51))
  - Standards : 3 (Co C 01-061, Co A 92081(87 A 298), Co 6907)
  - b) Design : Randomized Block Design.
  - c) Replications : Three
  - d) Spacing : 90cm between rows.
  - e) Plot size : Gross : 8 R x 6 M x 0.9 M = 43.2 Sq.m  
Net : 6 R x 6 M x 0.9 M = 32.4 Sq.m
  - f) Seed rate : Four three budded setts/metre.
  - g) Date of Planting : 05 -02 -15
  - h) Fertilizers : 168kg N/ha in two splits at 45 and 90 days after planting. 75 kg P<sub>2</sub>O<sub>5</sub> + 100 kg k<sub>2</sub>O/ha as basal dose.
  - i) Irrigations : Once in a week till the break of monsoon, as and when necessary during the monsoon and once in 21 days during maturity phase from November till harvest.
  - j) Date of Harvesting : 09,10 -02 -2016
10. Data analysed : In Advanced Varietal Trial (Early) – I plant (2015-16), the standard Co C 01-061 (18.18) and the clone Co V 12-356 (18.08) recorded higher per cent juice sucrose. The clone Co A 12-322 recorded higher cane yield of 118.93 t/ha while the standard Co C 01-061 recorded cane yield of 90.43 t/ha. The clone Co A 12-321 recorded higher

CCS yield of 13.66 t/ha followed by Co V 12-356 (2006 V 51) with 13.32 t/ha CCS yield while the standard Co C 01-061 recorded CCS yield of 12.00 t/ha.

11. Summary of results : The clone Co A 12-322 recorded higher cane yield of 118.93 t/ha while the clone Co A 12-321 recorded higher CCS yield of 13.66 t/ha followed by Co V 12-356 (2006 V 51) with 13.32 t/ha CCS yield.

12. Results that can be transferred to the farmers :  
The promising varieties need to be tested in the farmers' fields.

1. Project No : IV (c)
2. Code No : P1 - 2015 / 15 - AHD / F30 / 0230.
3. Name of the project : Advanced Varietal Trial (Early) – Second Plant
4. Site of the Experiment : Sugarcane Research Station, Vuyyuru.
5. Project Leader and his associates : Dr. V. Satya Priya Lalitha, Pr.Scientist (Pl.Br.)
6. Objective : To screen and select high yielding and sucrose rich clones suitable for East - Coast zone.
7. Date of initiation : 1990
8. Results if any achieved so far : In Advanced Varietal Trial (Early) - II plant (2012-13), the standard Co C 01-061 recorded highest percent juice sucrose of 19.17 followed by the clone Co V 09-356 (2003 V 46) with 19.11 percent juice sucrose. The clone Co C 08-336 recorded highest cane yield of 127.89 t/ha while the standard Co C 01-061 recorded 115.97 t/ha cane yield. The clone Co C 08-336 also recorded highest CCS yield of 16.36 t/ha followed by the clone Co V 09-356 with 16.26 t/ha CCS yield.
9. Techniques adopted :
  - a) Treatments : 4 ( Co A 11-321, Co A 11-323, Co C 10-336, Co C 11-336)
  - Standards : 3 (Co C 01-061, Co A 92081(87 A 298), Co 6907)
  - b) Design : Randomized Block Design.
  - c) Replications : Three
  - d) Spacing : 120cm between rows.
  - e) Plot size : Gross : 8 R x 6 M x 1.2 M = 57.6 Sq.m  
Net : 6 R x 6 M x 1.2 M = 43.2 Sq.m
  - f) Seed rate : Four three budded setts/metre.

- g) Date of Planting : 10 -01 -15  
 h) Fertilizers : 168kg N/ha in two splits at 45 and 90 days after planting. 75 kg P<sub>2</sub>O<sub>5</sub> + 100 kg K<sub>2</sub>O/ha as basal dose.  
 i) Irrigations : Once in a week till the break of monsoon, as and when necessary during the monsoon and once in 21 days during maturity phase from November till harvest.  
 j) Date of Harvesting : 25 -12 -2015

10. Data analysed : In Advanced Varietal Trial (Early) - II plant (2015-16), the clone Co A 11- 321 recorded higher per cent juice sucrose of 18.63 where as the standard Co C 01-061 recorded 18.05 percent juice sucrose. The clone Co C 11-336 recorded higher cane yield of 93.52 t/ha while the standard Co C 01-061 recorded 84.95 t/ha cane yield. Higher CCS yield of 11.06 t/ha was recorded by the standard Co C 01-061 followed by clone Co C 11-336 with CCS yield of 10.59 t/ha.

11. Summary of results : The clone Co C 11-336 recorded higher cane yield of 93.52 t/ha. Higher CCS yield of 11.06 t/ha was recorded by the standard Co C 01-061 followed by clone Co C 11-336 with CCS yield of 10.59 t/ha.

12. Results that can be transferred to the farmers :  
 The promising varieties need to be tested in the farmers' fields.

1. Project No : IV (d)  
 2. Code No : P1 - 2015 / 16 - AHD / F30 / 0230.  
 3. Name of the project : Advanced Varietal Trial (Early) – Ratoon  
 4. Site of the Experiment : Sugarcane Research Station, Vuyyuru.  
 5. Project Leader and his associates : Dr. V. Satya Priya Lalitha, Pr.Scientist (Pl.Br.)  
 6. Objective : To screen and select high yielding and sucrose rich clones suitable for East - Coast zone.  
 7. Date of initiation : 1990  
 8. Results if any achieved so far : In Advanced Varietal Trial (Early) - Ratoon (2012-13), the clone Co V 09-356 (2003 V 46) recorded highest percent juice sucrose of 19.56 while standard Co A 92081 recorded 18.91 percent juice sucrose. The standard Co C 01- 061 recorded highest cane yield of 112.15 t/ha. The clone Co V 09-356 (2003 V 46) recorded highest CCS yield of 16.06 t/ha.

9. Techniques adopted :
- a) Treatments : 4 ( Co A 11-321, Co A 11-323, Co C 10-336, Co C 11-336)
  - Standards : 3 (Co C 01-061, Co A 92081(87 A 298), Co 6907)
  - b) Design : Randomized Block Design.
  - c) Replications : Three
  - d) Spacing : 120cm between rows.
  - e) Plot size : Gross : 8 R x 6 M x 1.2 M = 57.6 Sq.m  
Net : 6 R x 6 M x 1.2 M = 43.2 Sq.m
  - f) Seed rate : -
  - g) Date of Ratooning : 05-02-15
  - h) Fertilizers : Nitrogen @ 280 kg N/ha in two equal doses at the time of ratooning and 45 days after ratooning, P @100 kg/ha and K @ 168 kg/ha as basal dose.
  - i) Irrigations : Once in a week till the break of monsoon, as and when necessary during monsoon and once in 21 days during maturity phase from November till harvest.
  - j) Date of Harvesting : 26 -12 -2015

10. Data analysed : In Advanced Varietal Trial (Early) - Ratoon (2015-16), the standard Co C 01-061 recorded higher percent juice sucrose of 18.08. The clone Co A 11-321 recorded higher cane yield of 84.03 t/ha while the standard Co C 01-061 recorded cane yield of 80.94 t/ha. The standard Co C 01-061 recorded higher CCS yield of 10.45 t/ha followed by clone Co A 11-321 with 10.17 t/ha CCS yield.

11. Summary of results : The clone Co A 11-321 recorded higher cane yield of 84.03 t/ha. The standard Co C 01-061 recorded higher CCS yield of 10.45 t/ha followed by clone Co A 11-321 with 10.17 t/ha CCS yield.

12. Results that can be transferred to the farmers :  
The promising varieties need to be tested in the farmers' fields.

- 1. Project No : IV (e)
- 2. Code No : P1 - 2015 / 17 - AHD / F30 / 0230.
- 3. Name of the project : Initial Varietal Trial (Mid-late)
- 4. Site of the Experiment : Sugarcane Research Station, Vuyyuru
- 5. Project Leader and his associates : 1.Dr. V.Satya Priya Lalitha, Pr.Scientist (Pl.Br)  
2. Dr.V. Raja Bapa Rao, Pr. Scientist (Pl. Br.)

6. Objective : To screen and select high yielding and sucrose rich genotypes suitable for East – Coast zone.
7. Date of initiation : 1990
8. Results if any achieved so far : In IVT (Mid-late) (2013-14), the standard Co V 92102 recorded highest percent juice sucrose of 20.11 at 12<sup>th</sup> month. The clone Co A 11-324 recorded highest stalk population of 1,03,819 /ha where as the standard Co V 92102 recorded population of 97,049/ha. The clone Co A 11-324 recorded highest cane yield of 127.78 t/ha cane yield where as the standard Co V 92102 recorded 125.52 t/ha cane yield. The standard Co V 92102 recorded highest CCS yield of 18.60 t/ha.
9. Techniques adopted :
- a) Treatments : 8 (Co A 12-324, Co A 13-325, Co A 13-326, Co A 13-327, Co A 13-328, Co C 13-339, Co Or 13-346, Co V 12-357 (2005 V 96))
  - Standards : 3 (Co 86249, Co V 92102 (83 V 15), Co 7219)
  - b) Design : Randomized Block Design.
  - c) Replications : Three
  - d) Spacing : 90cm between rows.
  - e) Plot size : Gross : 6 R x 6 M x 0.9 M = 32.4 Sq.m  
Net : 4 R x 6 M x 0.9 M = 21.6 Sq.m
  - f) Seed rate : 4 three budded setts/metre.
  - g) Date of Planting : 14-01-15
  - h) Fertilizers : Nitrogen @ 168 kg N/ha in two equal doses at 45 and 90 days after planting. P @ 75 kg/ha and K @ 100 kg/ha as basal dose.
  - i) Irrigations : Once in a week till the break of monsoon, as and when necessary during monsoon and once in 21 days during maturity phase from November till harvest.
  - h) Date of Harvesting : 10-02-2016
10. Data analysed : In IVT (Mid-late) (2015-16), the standard Co V 92102 recorded highest percent juice sucrose of 19.88 at 12<sup>th</sup> month followed by Co C 13-339 (19.61) and Co A 12-324 (19.18). The clone Co A 13-327 recorded higher stalk population of 1,01,389 /ha where as the standard Co 7219 recorded population of 85,339/ha. The clone Co A 13-327 recorded higher cane yield of 132.25 t/ha and CCS yield of 17.02 t/ha while the standard Co V 92102 recorded 113.73 t/ha cane yield and 16.77 t/ha CCS yield.
11. Summary of results : The clone Co A 13-327 recorded higher cane yield of 132.25 t/ha and CCS yield of 17.02 t/ha while the standard Co V 92102 recorded 113.73 t/ha cane yield and 16.77 t/ha CCS yield.
12. Results that can be transferred to the farmers :  
The promising varieties need to be tested in the farmers' fields.

Table 1A: Details of fluff sown and per cent survival of seedlings in Seedling nursery (2015-16)

No. of SCs: 30 ZCs: 13 PCs: 13 GCs: 18 D.O.S.: 12,13-03-2015 D.O.T.:21,22-05-2015

S. No.	Crosses / GCs/PCs	Fluff weight (g)	No of seedlings transplanted	No of seedlings survived	Per cent survival	No of seedlings obtained/gm of fluff sown
Station Crosses:						
1	Co Jaw 270 X Co 62198	23	NG	-	-	-
2	Co Jaw 270 X N Co 310	43	NG	-	-	-
3	Co Jaw 270 X Co 89029	25	370	248	67.03	14.8
4	Co Jaw 270 X Co H 15	31	167	100	59.88	5.39
5	Co 740 X Co 62198	17.5	75	44	58.67	4.29
6	Co 99006 X Co Jaw 270	27	55	32	58.18	2.04
7	CP 52-1 X Co H 15	28.5	6	2	33.33	0.21
8	Co 86002 X ISH 176	17.5	38	24	63.16	2.17
9	Co J 64 X Co 87268	33	41	30	73.17	1.24
10	Co A 93082 X N Co 310	23	50	32	64.00	2.17
11	ISH 100 X Co 89029	21.5	565	296	52.39	26.28
12	Co 99006 X Co 62198	18.5	195	139	71.28	10.54
13	Co 0240 X Co775	58.5	525	346	65.90	8.97
14	69 A 591 X Co 62198	27.5	300	158	52.67	10.91
15	UP 9530 X Co 62198	20.5	324	216	66.67	15.8
16	Co Snk 05-103 X Co 62198	21.5	311	249	80.06	14.47
17	UP 9530 X Co 775	10.5	195	159	81.54	18.57
18	Co A 92081X Co S 510	6	NG	-	-	-
19	2000 V 59 X Co 1148	44	350	187	53.43	7.95
20	Co V 89101 X 2000 V 59	31.5	260	204	78.46	8.25
21	Co Se 96436 X 2000 V 59	28	425	204	48.00	15.18
22	Co 99006 X Co Se 92423	17.5	238	85	35.71	13.6
23	85 R 186 X Co 1148	18	107	54	50.47	5.94
24	Co 8371 X SP 80-185	8	25	5	20.00	6.25
25	MS 68/47 X 89 V 74	35	375	222	59.20	10.71
26	Co C 671 X Co V 92102	19.5	NG	-	-	-
27	Co V 94101 X 2003 V 46	13	18	11	61.11	1.38
28	C 79218 X Co A 7602	23.5	5	2	40.00	0.21
29	Co C 671 X Co T 8201	31.5	105	32	30.48	3.33
30	Co A 07321 X ISH 50	10	88	58	65.91	8.8
	Total	732.5	5213	3139	60.21	7.15
Zonal Crosses:						
1	ISH 100 X Co 94008	44	425	291	68.47	9.66
2	Co A 92081 X Co T 8201	25	20	5	25.00	0.8
3	Co A 92081 X Co 94008	20	9	5	55.56	0.45
4	Co V 89101 X Co T 8201	35.5	490	352	71.84	13.8
5	Co V 89101 X ISH 69	31.5	325	127	39.08	10.32
6	Co 8013 X Co C 671	18.5	5	3	60.00	0.27
7	Co V 89101 X Co A7602	22	125	105	84.00	5.68
8	Co 8371 X Co 99006	32	225	116	51.56	7.03
9	Co V 94101 X Co 99006	18.5	5	2	40.00	0.27
10	Co C 90063 X Co 94008	14.5	225	90	40.00	15.52
11	Co A 92081 X Co V 92102	4	NG	-	-	-
12	Co 86032 X Co 94008	39	350	138	39.43	8.97
13	Co 740 X Co C 671	20.5	14	11	78.57	0.68
	Total	325	2218	1245	56.13	6.82

Polycrosses*:						
1	Co M 0265	19.5	41	24	58.54	2.1
2	ISH 100	21.5	250	211	84.40	11.63
3	Co 94012	13	100	10	10.00	5.77
4	Co 85002	29.5	423	194	45.86	14.34
5	Co A 7602	46.5	356	135	37.92	7.66
6	86 V 96 (Co V 94101)	24	360	240	66.67	15
7	Co C 671	30.5	17	10	58.82	0.56
8	CP 52-68	11.5	212	112	52.83	18.43
9	Co 2000 -10	30.5	60	21	35.00	1.97
10	Co C 90063	42	279	81	29.03	6.64
11	Co 7201	26.5	374	242	64.71	14.11
12	Co 8371	38.5	66	2	3.03	1.71
13	Co V 89101(81 V 48)	47.5	225	120	53.33	4.74
	Total	381	2763	1402	50.74	7.19
GCs:						
1	2000 V 59 (Co V 06-356)	4.5	25	5	20.00	5.56
2	2003V 46 (Co V 09-356)	31.5	25	0	0.00	0.79
3	89V 74	24	145	47	32.41	6.04
4	93V 297	12	134	26	19.40	11.17
5	97 R 129	35	97	19	19.59	2.77
6	Co 8013	45.5	150	85	56.67	3.3
7	Co 8338	51.5	533	210	39.40	10.35
8	Co 92006	61	294	3	1.02	4.82
9	Co 94012	8.5	4	1	25.00	0.47
10	Co 99006	15	168	45	26.79	11.2
11	Co A 90081 (87 A 380)	6.5	125	6	4.80	19.23
12	Co A 92081 (87 A 298)	4.5	10	5	50.00	2.22
13	Co A 92082 (86 A 146)	5	NG	-	-	-
14	Co V 89101 (81 V 48)	51.5	142	42	29.58	2.76
15	Co V 92102(83 V 15)	6	8	1	12.50	1.33
16	Co V 94101 (86 V 96)	8	25	4	16.00	3.13
17	ISH 100	21.5	54	6	11.11	2.51
18	Q 63	6	NG	-	-	-
	Total	397.5	1939	505	26.04	4.88
	Grand Total	1836.0	12133	6291	51.85	6.61

NG: Not Germinated

\*PCs: Co 775, Co 99006, Co 94008, Co T 8201, Co 86011, Co V 92102, ISH 69, Co 93009 (Males)

Table 1B: Performance of selected seedlings in Seedling nursery (2015-16)

No. of seedlings transplanted: 12133

No. of seedlings survived: 6291

No. of seedlings selected: 253

% Survival: 51.85

S.No.	Clone	Parentage	No.of canes/ clump	Clump Weight (Kg)	H.R.- Brix	LMC (cm)	Diameter (cm)
1	2016V1	CoV89101×CoT8201	3	1.5	24.05	106.7	2.97
2	2016V2	CoV89101×CoT8201	4	3	23.20	122.5	2.89
3	2016V3	CoV89101×CoT8201	4	4	21.80	147.5	2.83
4	2016V4	CoV89101×CoT8201	5	4	22.93	164.0	2.38
5	2016V5	CoV89101×CoT8201	7	5	24.80	108.6	2.65
6	2016V6	CoV89101×CoT8201	4	3	22.00	148.8	2.96
7	2016V7	CoV89101×CoT8201	4	3	21.50	192.5	2.59
8	2016V8	CoV89101×CoT8201	4	3	21.80	171.3	2.82
9	2016V9	UP9530×Co62198	3	2	23.50	150.0	2.42
10	2016V10	UP9530×Co62198	5	3.5	24.20	129.0	2.32
11	2016V11	UP9530×Co62198	6	7.5	24.33	171.7	2.67
12	2016V12	UP9530×Co62198	2	3.5	22.56	205.0	2.85
13	2016V13	UP9530×Co62198	4	2.5	23.75	133.8	2.61
14	2016V14	UP9530×Co62198	5	4	21.16	171.0	2.37
15	2016V15	UP9530×Co62198	6	7	25.00	158.3	2.48
16	2016V16	UP9530×Co62198	4	3	24.13	130.0	3.10
17	2016V17	UP9530×Co62198	7	6	19.95	170.7	2.45
18	2016V18	C79218×CoA7602	5	6	19.90	147.0	2.41
19	2016V19	CoJaw270×Co89029	9	7	18.26	140.0	2.52
20	2016V20	CoJaw270×Co89029	5	3.5	21.80	127.0	2.61
21	2016V21	CoJaw270×Co89029	5	6	21.33	135.0	2.52
22	2016V22	CoJaw270×Co89029	8	7	22.05	180.0	2.14
23	2016V23	CoJaw270×Co89029	4	5	21.30	172.5	2.45
24	2016V24	CoJaw270×Co89029	6	5	22.66	170.8	2.16
25	2016V25	CoJaw270×CoH15	7	9	20.50	185.7	2.45
26	2016V26	Co740×Co62198	2	1.5	26.15	172.5	2.63
27	2016V27	Co740×Co62198	4	2.5	23.93	150.0	2.57
28	2016V28	Co8371×Co99006	9	10	23.96	101.7	2.81
29	2016V29	Co8371×Co99006	4	4	21.10	135.0	3.02
30	2016V30	Co8371×Co99006	3	5	24.80	140.0	2.53
31	2016V31	Co8371×Co99006	5	10	23.86	155.0	3.05
32	2016V32	Co8371×Co99006	7	9	25.86	132.1	2.79
33	2016V33	Co8371×Co99006	5	7	21.20	156.0	2.99
34	2016V34	69A591×Co62198	4	9	21.40	260.0	2.52
35	2016V35	69A591×Co62198	7	6	23.10	110.7	2.88
36	2016V36	69A591×Co62198	2	5	24.25	162.5	2.74

37	2016V37	69A591×Co62198	6	7	21.60	135.8	2.89
38	2016V38	69A591×Co62198	12	11	21.06	160.4	2.51
39	2016V39	69A591×Co62198	6	10	25.26	183.3	2.96
40	2016V40	69A591×Co62198	10	13	21.40	167.5	2.67
41	2016V41	69A591×Co62198	3	6	22.65	178.3	3.16
42	2016V42	69A591×Co62198	9	7	21.63	161.7	2.63
43	2016V43	69A591×Co62198	3	4.5	23.05	145.0	2.72
44	2016V44	69A591×Co62198	6	7	24.03	176.7	2.42
45	2016V45	69A591×Co62198	3	3.5	20.83	168.3	2.58
46	2016V46	69A591×Co62198	5	4.5	23.10	227.0	2.69
47	2016V47	69A591×Co62198	14	12	23.23	155.0	2.41
48	2016V48	69A591×Co62198	3	5	23.40	163.3	2.80
49	2016V49	69A591×Co62198	4	4	23.45	160.0	2.57
50	2016V50	Co86032×Co94008	7	4	23.85	138.6	2.57
51	2016V51	Co86032×Co94008	7	6	23.06	157.9	2.46
52	2016V52	Co86032×Co94008	3	2.5	26.55	140.0	2.47
53	2016V53	Co86032×Co94008	5	6	22.60	147.0	2.75
54	2016V54	Co86032×Co94008	4	4.5	24.40	173.8	2.57
55	2016V55	Co0240×Co775	6	4	25.90	125.8	3.10
56	2016V56	Co0240×Co775	2	2.5	22.30	180.0	2.87
57	2016V57	Co0240×Co775	7	5	22.96	144.3	2.44
58	2016V58	Co0240×Co775	3	4	23.10	155.0	3.12
59	2016V59	Co0240×Co775	3	2.5	24.25	183.3	2.69
60	2016V60	Co0240×Co775	4	4.5	24.25	143.8	2.79
61	2016V61	Co0240×Co775	4	3.5	24.65	155.0	2.66
62	2016V62	Co0240×Co775	2	2.5	24.00	172.5	2.35
63	2016V63	Co0240×Co775	5	4	24.80	152.0	2.68
64	2016V64	Co0240×Co775	3	4	24.90	163.3	2.79
65	2016V65	Co0240×Co775	3	3	24.00	153.3	2.65
66	2016V66	CoC90063×Co94008	10	10	24.60	154.0	2.89
67	2016V67	CoC90063×Co94008	8	8	23.85	105.6	2.80
68	2016V68	CoC90063×Co94008	6	7	25.15	140.0	2.51
69	2016V69	CoC90063×Co94008	10	10	25.30	152.6	2.34
70	2016V70	CoC90063×Co94008	5	8	24.40	121.0	2.58
71	2016V71	CoC90063×Co94008	12	12	23.00	110.0	2.71
72	2016V72	CoC90063×Co94008	6	8	25.33	136.7	2.70
73	2016V73	CoV89101×CoA7602	3	4.5	22.40	151.7	2.46
74	2016V74	CoV89101×CoA7602	4	6	24.96	125.0	2.79
75	2016V75	MS68/47×89V74	2	2.5	21.05	175.0	3.24
76	2016V76	MS68/47×89V74	6	2.5	24.55	114.2	2.59
77	2016V77	MS68/47×89V74	6	5	20.50	138.3	2.66
78	2016V78	CoSnk05-103×Co62198	2	2	23.70	200.0	3.24

79	2016V79	CoSnk05-103×Co62198	4	2	20.96	181.3	2.68
80	2016V80	CoSnk05-103×Co62198	4	3	21.80	183.8	2.53
81	2016V81	CoSnk05-103×Co62198	3	3	22.06	205.0	2.81
82	2016V82	CoSnk05-103×Co62198	4	2	23.50	177.5	2.35
83	2016V83	CoSnk05-103×Co62198	3	2.5	20.75	251.7	2.46
84	2016V84	CoSnk05-103×Co62198	3	4	25.65	221.7	2.60
85	2016V85	CoSnk05-103×Co62198	4	4	22.86	170.0	2.74
86	2016V86	CoSnk05-103×Co62198	12	11	22.53	138.3	2.37
87	2016V87	CoSnk05-103×Co62198	4	5	24.56	183.8	2.59
88	2016V88	CoSnk05-103×Co62198	7	9	23.45	235.0	2.51
89	2016V89	CoSnk05-103×Co62198	4	4	23.45	206.3	2.82
90	2016V90	CoSnk05-103×Co62198	6	5	22.96	266.7	2.42
91	2016V91	CoSe96436×2000V59	4	5	23.93	227.5	2.50
92	2016V92	CoSe96436×2000V59	4	4	25.25	220.0	2.51
93	2016V93	CoSe96436×2000V59	4	3	20.60	130.0	2.35
94	2016V94	CoSe96436×2000V59	3	2	23.15	166.7	2.62
95	2016V95	CoSe96436×2000V59	4	4	23.80	143.8	2.74
96	2016V96	CoSe96436×2000V59	6	7	23.50	226.7	3.14
97	2016V97	CoSe96436×2000V59	3	5	22.65	278.3	2.27
98	2016V98	CoSe96436×2000V59	4	3	22.25	161.3	2.52
99	2016V99	CoSe96436×2000V59	8	10	21.03	141.3	2.02
100	2016V100	CoSe96436×2000V59	4	3	21.15	153.8	2.40
101	2016V101	ISH100 PC	4	5	19.45	222.5	2.76
102	2016V102	ISH100 PC	5	7.5	22.60	215.0	2.42
103	2016V103	ISH100 PC	4	8	22.06	221.3	2.90
104	2016V104	ISH100 PC	4	5	21.45	180.0	2.51
105	2016V105	ISH100 PC	6	5	21.06	247.5	2.40
106	2016V106	ISH100 PC	6	7	20.45	193.3	2.83
107	2016V107	ISH100 PC	4	5	20.86	175.0	2.59
108	2016V108	CoJ64×Co87268	4	6	24.45	175.0	2.95
109	2016V109	CoJ64×Co87268	7	7	21.65	140.0	2.27
110	2016V110	CoJ64×Co87268	6	7	22.85	175.0	2.50
111	2016V111	CoV89101×2000V59	2	1	22.00	120.0	2.63
112	2016V112	CoV89101×2000V59	6	7	22.00	150.8	2.59
113	2016V113	CoV89101×2000V59	4	7	24.90	173.8	2.59
114	2016V114	CoV89101×2000V59	2	1	23.20	155.0	2.75
115	2016V115	CoV89101×2000V59	6	7	22.15	196.7	2.29
116	2016V116	CoV89101×2000V59	11	9	24.90	154.1	2.62
117	2016V117	CoV89101×2000V59	5	2	23.20	152.0	2.26
118	2016V118	CoV89101×2000V59	4	5	23.35	160.0	2.62
119	2016V119	CoV89101×2000V59	5	6	26.30	134.0	2.81
120	2016V120	CoV89101×2000V59	3	3	23.90	151.7	2.82

121	2016V121	CoV89101×2000V59	3	2.5	24.85	128.3	2.61
122	2016V122	CoV89101×2000V59	5	4	22.00	191.0	2.26
123	2016V123	CoV89101×2000V59	3	2	24.80	133.3	3.13
124	2016V124	CoV89101×2000V59	4	4	25.05	205.0	2.41
125	2016V125	CoV89101×2000V59	4	2	23.90	150.0	2.79
126	2016V126	CoV89101×2000V59	4	2	24.70	138.8	2.77
127	2016V127	CoV89101×2000V59	5	2	21.60	161.0	2.39
128	2016V128	CoV89101×2000V59	4	3	23.85	176.3	2.53
129	2016V129	CoV89101×2000V59	4	4	22.65	145.0	3.02
130	2016V130	CoV89101×2000V59	3	2.5	24.90	143.3	2.72
131	2016V131	CoV89101×2000V59	3	3	22.40	176.7	2.69
132	2016V132	CoV89101×2000V59	5	4	22.50	189.0	2.53
133	2016V133	CoV89101×2000V59	6	7	23.00	228.3	2.56
134	2016V134	CoV89101×2000V59	3	3.5	21.20	138.3	2.60
135	2016V135	CoV89101×2000V59	2	2	25.25	167.5	2.75
136	2016V136	CoV89101×2000V59	6	8	25.20	233.3	2.82
137	2016V137	CoV89101×2000V59	3	1.5	22.65	148.3	2.97
138	2016V138	Co99006×Co62198	6	5	22.00	163.3	2.69
139	2016V139	Co99006×Co62198	3	1.5	25.80	136.7	2.72
140	2016V140	Co99006×Co62198	5	3	23.60	179.0	2.72
141	2016V141	Co99006×Co62198	3	1.5	28.10	175.0	2.61
142	2016V142	Co99006×Co62198	5	4	23.25	170.0	2.49
143	2016V143	Co99006×Co62198	2	0.5	22.50	145.0	3.19
144	2016V144	Co99006×Co62198	5	3.5	26.65	172.0	2.82
145	2016V145	Co99006×Co62198	6	5	25.55	192.5	2.49
146	2016V146	Co99006×Co62198	7	4	23.75	150.0	2.67
147	2016V147	Co99006×Co62198	5	1	26.55	118.0	2.30
148	2016V148	Co99006×Co62198	4	3	23.95	203.8	2.41
149	2016V149	Co99006×Co62198	6	5.5	23.50	164.2	2.73
150	2016V150	Co99006×Co62198	3	1.5	23.55	150.0	2.32
151	2016V151	Co99006×Co62198	7	8	25.60	164.3	2.54
152	2016V152	ISH100 ×Co94008	7	8	24.15	165.7	2.68
153	2016V153	ISH100 ×Co94008	3	2.5	22.10	130.0	2.51
154	2016V154	ISH100 ×Co94008	8	9	23.43	178.1	2.53
155	2016V155	ISH100 ×Co94008	6	8	21.46	190.0	2.79
156	2016V156	ISH100 ×Co94008	6	6	21.65	155.0	2.49
157	2016V157	ISH100 ×Co94008	5	6.5	23.70	169.0	2.78
158	2016V158	ISH100 ×Co94008	6	6.5	20.70	162.5	2.38
159	2016V159	ISH100 ×Co94008	5	7.5	22.60	154.2	2.73
160	2016V160	2000V59×Co1148	6	11	21.23	174.2	2.98
161	2016V161	2000V59×Co1148	4	6	22.60	152.5	2.60
162	2016V162	2000V59×Co1148	4	6	21.90	180.0	2.65

163	2016V163	2000V59×Co1148	4	5.5	25.50	202.5	2.43
164	2016V164	2000V59×Co1148	4	5	22.40	170.0	2.68
165	2016V165	2000V59×Co1148	4	5	23.26	181.3	2.99
166	2016V166	2000V59×Co1148	3	5	24.85	173.3	2.54
167	2016V167	2000V59×Co1148	6	7	22.40	133.3	2.74
168	2016V168	Co85002 PC	8	8	24.70	192.5	2.65
169	2016V169	Co85002 PC	3	3	21.30	133.3	2.50
170	2016V170	Co85002 PC	3	2.5	22.86	136.7	3.09
171	2016V171	Co8338 GC	12	14	23.20	180.1	2.89
172	2016V172	Co8338 GC	7	9	26.40	178.6	2.75
173	2016V173	Co8338 GC	6	6.5	22.00	188.3	2.51
174	2016V174	Co8338 GC	4	5	23.50	233.8	2.41
175	2016V175	Co8338 GC	2	3	23.60	190.0	2.91
176	2016V176	Co8338 GC	3	3	22.75	158.3	2.77
177	2016V177	Co8338 GC	3	6	21.55	253.3	2.75
178	2016V178	Co8338 GC	5	7.5	23.00	205.0	2.79
179	2016V179	Co8338 GC	7	6	26.15	160.0	2.50
180	2016V180	Co8338 GC	3	2.5	24.00	185.0	2.99
181	2016V181	Co8338 GC	3	3	21.55	153.3	2.06
182	2016V182	CoA07-321×ISH50	3	4	22.60	185.0	2.34
183	2016V183	CoC671×CoT8201	2	2	21.85	165.0	2.85
184	2016V184	CoC671×CoT8201	8	7.5	23.40	147.5	2.97
185	2016V185	CoC671×CoT8201	4	5	24.50	156.3	2.94
186	2016V186	UP9530×Co775	2	1.5	21.55	115.0	2.35
187	2016V187	UP9530×Co775	4	5	25.20	191.3	2.49
188	2016V188	UP9530×Co775	5	7	23.35	154.0	2.73
189	2016V189	UP9530×Co775	4	5	24.15	191.3	2.55
190	2016V190	UP9530×Co775	4	4	21.15	180.0	2.75
191	2016V191	Co99006×CoJaw270	3	2	22.75	115.0	2.23
192	2016V192	85R186×Co1148	9	10	21.93	224.5	2.35
193	2016V193	85R186×Co1148	4	5	25.05	252.5	2.46
194	2016V194	CoV89101 PC	6	5	20.55	230.0	2.38
195	2016V195	CoV89101 PC	4	1.5	21.65	190.0	1.91
196	2016V196	Co99006×CoSe92423	6	4	22.70	215.0	2.51
197	2016V197	Co99006×CoSe92423	8	5	22.55	135.6	2.98
198	2016V198	Co99006×CoSe92423	8	4	24.35	168.8	2.25
199	2016V199	Co99006×CoSe92423	6	5.5	22.20	227.5	2.26
200	2016V200	Co99006×CoSe92423	6	5	26.15	182.5	2.28
201	2016V201	Co99006×CoSe92423	11	6	21.20	180.0	2.32
202	2016V202	Co99006×CoSe92423	4	3	26.30	221.3	2.23
203	2016V203	Co99006×CoSe92423	6	6	22.00	201.7	2.88
204	2016V204	Co99006×CoSe92423	7	3	22.80	169.3	2.12

205	2016V205	Co99006×CoSe92423	5	3	21.65	136.0	2.70
206	2016V206	CoA7602 PC	3	6	24.35	255.0	2.50
207	2016V207	CoA7602 PC	7	8	24.85	222.1	2.71
208	2016V208	CoA7602 PC	8	6	21.05	167.5	2.66
209	2016V209	CoA7602 PC	6	4	22.20	191.7	2.12
210	2016V210	CoA7602 PC	10	10.5	20.55	187.0	2.56
211	2016V211	CoA7602 PC	7	6	25.85	157.1	2.23
212	2016V212	CoA7602 PC	3	5	22.65	190.0	2.36
213	2016V213	CoA7602 PC	3	4	23.95	153.3	2.63
214	2016V214	Co7201 PC	6	5	23.10	178.3	2.22
215	2016V215	Co7201 PC	4	5	22.70	180.0	2.23
216	2016V216	Co7201 PC	5	9	22.95	204.0	3.02
217	2016V217	Co7201 PC	6	5	22.70	207.5	2.89
218	2016V218	Co7201 PC	5	11	21.80	227.0	2.38
219	2016V219	Co7201 PC	7	10	24.15	162.9	2.27
220	2016V220	CP5268 PC	4	4	22.00	222.5	3.06
221	2016V221	CP5268 PC	12	12	22.60	276.7	2.43
222	2016V222	ISH100×Co89029	4	4	23.55	258.8	2.81
223	2016V223	ISH100×Co89029	6	4	23.95	175.0	2.60
224	2016V224	ISH100×Co89029	4	4	22.00	236.3	2.35
225	2016V225	ISH100×Co89029	6	8	22.10	299.2	2.64
226	2016V226	CoV8910×ISH69	8	9	23.60	221.3	2.52
227	2016V227	CoV8910×ISH69	8	7	23.60	175.6	2.74
228	2016V228	CoV8910×ISH69	13	12	22.73	185.4	2.44
229	2016V229	Co92006 GC	8	9	24.20	193.8	2.75
230	2016V230	Co92006 GC	9	8	21.30	140.6	2.55
231	2016V231	Co92006 GC	8	11.5	23.30	175.0	2.97
232	2016V232	Co92006 GC	7	7	22.00	170.7	3.11
233	2016V233	Co92006 GC	11	14.5	23.00	176.8	3.11
234	2016V234	Co94012 PC	6	3.5	25.75	181.7	2.60
235	2016V235	97R129 GC	6	4.5	22.55	175.8	2.59
236	2016V236	97R129 GC	5	3	20.80	164.0	2.42
237	2016V237	97R129 GC	3	3	24.60	145.0	2.52
238	2016V238	97R129 GC	4	2.5	22.85	138.8	2.32
239	2016V239	97R129 GC	10	7	22.50	192.0	2.38
240	2016V240	97R129 GC	6	4	23.25	168.3	2.61
241	2016V241	Co8013 GC	8	5	24.20	207.5	2.51
242	2016V242	Co99006 GC	6	3	24.55	182.5	2.55
243	2016V243	Co99006 GC	4	3	24.45	182.5	2.62
244	2016V244	Co99006 GC	4	3	23.95	205.0	3.21
245	2016V245	CoV89101 GC	13	10	23.80	203.5	2.57
246	2016V246	CoV89101 GC	5	3	24.25	279.0	2.49

247	2016V247	CoV89101 GC	9	8	23.20	212.8	2.51
248	2016V248	CoV89101 GC	4	3	23.00	210.0	2.58
249	2016V249	CoV89101 GC	10	10	24.25	177.5	2.16
250	2016V250	93V297 GC	4	4	23.55	181.3	2.91
251	2016V251	93V297 GC	13	12	21.90	248.1	2.70
252	2016V252	93V297 GC	4	3.5	24.00	193.8	2.97
253	2016V253	93V297 GC	2	3	22.80	222.5	2.50
254	Co6907(C )	Co740 X Co 1287	7	5.0	22.30	156.4	2.46
255	Co7219(C )	Co 449 X Co658	6	3.0	24.70	132.5	2.67

Table 1C : Cross wise means in Seedling nursery ( 2015-16)

S. No.	Clones	Parentage	No. of canes / clump	Clump Weight (Kg)	H.R.-Brix	LMC (cm)	Diameter (cm)
1	2016 V 1 to 8	CoV89101×CoT8201	4.4	3.31	22.76	145.2	2.76
2	2017 V 9 to 17	UP9530×Co62198	4.7	4.22	23.18	157.7	2.59
3	2016 V 18	C79218×CoA7602	5.0	6.00	19.90	147.0	2.41
4	2016 V 19 to 24	CoJaw270×Co89029	6.2	5.58	21.23	154.2	2.40
5	2016 V 25	CoJaw270×CoH15	7.0	9.00	20.50	185.7	2.45
6	2016 V 26 to 27	Co740×Co62198	3.0	4.0	25.04	161.25	2.6
7	2016 V 28 to 33	Co8371×Co99006	5.5	7.5	23.46	136.6	2.87
8	2016 V 34 to 49	69A591×Co62198	6.1	7.16	22.72	169.7	2.70
9	2016 V 50 to 54	Co86032×Co94008	5.2	4.60	24.09	151.4	2.56
10	2016 V 55 to 65	Co0240×Co775	3.8	3.59	24.10	157.1	2.74
11	2016 V 66 to 72	CoC90063×Co94008	8.1	9.00	24.52	131.4	2.65
12	2016 V 73 to 74	CoV89101×CoA7602	3.5	5.25	23.68	138.3	2.63
13	2016 V 75 to 77	MS68/47×89V74	4.7	3.33	22.03	142.5	2.83
14	2016 V 78 to 90	CoSnk05-103 ×Co62198	4.62	4.35	22.94	201.6	2.62
15	2016 V 91 to 100	CoSe96436×2000V59	4.40	4.60	22.73	184.9	2.51
16	2016 V 101 to 107	ISH100 PC	4.7	6.07	21.13	207.8	2.63
17	2016 V 108 to 110	CoJ64×Co87268	5.7	6.67	22.98	163.3	2.57
18	2016 V 111 to 137	CoV89101×2000V59	4.3	3.89	23.57	163.0	2.65
19	2016 V 138 to 151	Co99006×Co62198	4.8	3.36	24.60	163.1	2.62
20	2016 V 152 to 159	ISH100 ×Co94008	5.8	6.75	22.47	163.1	2.61
21	2016 V 160 to 167	2000V59×Co1148	4.4	6.31	23.02	170.9	2.70
22	2016 V 168 to 170	Co85002 PC	4.7	4.50	22.95	154.2	2.75
23	2016 V 171 to 181	Co8338 GC	5.0	5.95	23.43	189.6	2.67
24	2016 V 182 to 185	CoC671×CoT8201	4.3	4.63	23.09	163.4	2.78
25	2016 V 186 to 190	UP9530×Co775	3.8	4.50	23.08	166.3	2.57
26	2016 V 191	Co99006×CoJaw270	3.0	2.00	22.75	115	2.23

27	2016 V 192 to 193	85R186×Co1148	6.5	7.50	23.49	238.48	2.41
28	2016 V 194 to 195	CoV89101 PC	5.0	3.25	21.10	210.00	2.15
29	2016 V 196 to 205	Co99006×CoSe92423	6.7	4.45	23.19	183.76	2.45
30	2016 V 206 to 213	CoA7602 PC	5.9	6.19	23.18	190.5	2.47
31	2016 V 214 to 219	Co7201 PC	5.5	7.50	22.90	193.3	2.50
32	2016 V 220 to 221	CP5268 PC	8.0	8.00	22.30	249.6	2.75
33	2016 V 222 to 225	ISH100×Co89029	5.0	5.00	22.90	242.3	2.60
34	2016 V 226 to 228	CoV89101×ISH69	9.7	9.33	23.31	194.1	2.57
35	2016 V 229 to 233	Co92006 GC	8.6	10.0	22.76	171.4	2.90
36	2016 V 234	Co94012 PC	6.0	3.5	25.75	181.7	2.60
37	2016 V 235 to 240	97R129 GC	5.7	4.00	22.76	164.0	2.47
38	2016 V 241	Co8013 GC	8.0	5.00	24.20	207.5	2.51
39	2016 V242 to 244	Co99006 GC	4.7	3.00	24.32	190.0	2.79
40	2016 V 245 to 249	CoV89101 GC	8.2	6.80	23.70	216.5	2.46
41	2016 V 249 to 253	93V297 GC	5.8	5.625	23.06	211.4	2.77

Table 2: Performance of clones in Settling nursery (2015-16)

No of clones studied: 180+2

No of clones selected: Selections were not forwarded due to damage of clones in fire accident. The trial was ratooned.

S. No.	Clone	Parentage	NMC (000s/ha)	HR -Brix	% flowering
1	2015 V 1	97 R 401 X Co 8213	57.500	18.9	08.70
2	2015 V 2	97 R 401 X Co 8213	82.500	23.0	-
3	2015 V 3	97 R 401 X Co 8213	92.500	16.7	-
4	2015 V 4	97 R 401 X Co 8213	62.500	20.0	-
5	2015V 5	97 R 401 X Co 8213	82.500	19.4	-
6	2015V 6	97 R 401 X Co 8213	82.500	20.4	-
7	2015 V 7	97 R 401 X Co 8213	95.000	20.7	-
8	2015 V 8	97 R 401 X Co 8213	67.500	20.3	03.70
9	2015 V 9	97 R 401 X Co 8213	37.500	21.0	-
10	2015 V 10	97 R 401 X Co 8213	67.500	20.6	11.11
11	2015 V 11	97 R 401 X Co 8213	70.000	23.8	-
12	2015 V 12	97 R 401 X Co 8213	115.000	24.3	-
13	2015 V 13	97 R 401 X Co 8213	95.000	18.5	-
14	2015 V 14	97 R 401 X Co 8213	60.000	22.8	-
15	2015 V 15	97 R 401 X Co 8213	62.500	20.0	20.00
16	2015 V 16	97 R 401 X Co 8213	55.000	19.2	-
17	2015 V 17	97 R 401 X Co 8213	67.500	19.4	-
18	2015 V 18	97 R 401 X Co 8213	77.500	22.3	-
19	2015 V 19	97 R 401 X Co 8213	72.500	20.7	-
20	2015 V 20	97 R 401 X Co 8213	67.500	22.8	07.41
21	2015 V 21	97 R 401 X Co 8213	70.000	21.1	-
22	2015 V 22	97 R 401 X Co 8213	65.000	19.3	11.54
23	2015 V 23	Co C 90063 X Co 94008	67.500	20.7	-
24	2015 V 24	Co C 90063 X Co 94008	65.000	20.9	19.23
25	2015 V 25	Co C 90063 X Co 94008	72.500	19.4	-

26	2015 V 26	Co C 90063 X Co 94008	47.500	20.1	-
27	2015 V 27	Co C 90063 X Co 94008	57.500	22.1	-
28	2015 V 28	Co C 90063 X Co 94008	37.500	19.3	-
29	2015 V 29	Co C 90063 X Co 94008	87.500	22.3	-
30	2015 V 30	Co C 90063 X Co 94008	40.000	21.6	31.25
31	2015 V 31	Co C 90063 X Co 94008	125.000	25.2	-
32	2015 V 32	ISH 100 X Co 86249	85.000	24.4	-
33	2015 V 33	ISH 100 X Co 86249	90.000	20.7	11.11
34	2015 V 34	ISH 100 X Co 86249	72.500	12.58	-
35	2015 V 35	Co A 92081 X Co T 8201	82.500	21.8	-
36	2015 V 36	Co A 92081 X Co T 8201	100.000	24.4	-
37	2015 V 37	81 V 48 X ISH 69	47.500	25.4	-
38	2015 V 38	81 V 48 X ISH 69	110.000	26.1	-
39	2015 V 39	81 V 48 X ISH 69	77.500	21.8	-
40	2015 V 40	81 V 48 X ISH 69	122.500	21.5	04.16
41	2015 V 41	81 V 48 X ISH 69	77.500	25.0	-
42	2015 V 42	81 V 48 X ISH 69	62.500	16.4	-
43	2015 V 43	81 V 48 X ISH 69	112.500	21.0	-
44	2015 V 44	81 V 48 X ISH 69	40.000	20.8	12.50
45	2015 V 45	81 V 48 X ISH 69	97.500	19.6	-
46	2015 V 46	81 V 48 X ISH 69	67.500	21.6	-
47	2015 V 47	81 V 48 X ISH 69	55.000	19.6	-
48	2015V 48	Co C 671 X Co 94008	62.500	13.6	-
49	2015 V 49	81 V 48 X 1SH 69	115.000	23.5	06.52
50	2015 V 50	81 V 48 X 1SH 69	97.500	23.8	43.59
51	2015 V 51	Co C 671 X Co 94008	62.500	20.8	-
52	2015 V 52	Co C 671 X Co 94008	80.000	19.0	-
53	2015 V 53	Co C 671 X Co 94008	105.000	18.0	-
54	2015 V 54	Co C 671 X Co 94008	110.000	19.0	-
55	2015 V 55	Co C 671 X Co 94008	110.000	22.6	-
56	2015 V 56	Co C 671 X Co 94008	82.500	20.9	-
57	2015 V 57	Co C 671 X Co 94008	80.000	15.8	-
58	2015 V 58	Co C 671 X Co 94008	52.500	22.0	-
59	2015 V 59	Co C 671 X Co 94008	45.000	19.7	-
60	2015 V 60	Co C 671 X Co 94008	25.000	17.6	-
61	2015V 61	Co C 671 X Co 94008	47.500	20.6	-
62	2015 V 62	Co C 671 X Co 94008	32.500	21.4	-
63	2015 V 63	Co M 0265 X Co T 8201	55.000	25.6	-
64	2015 V 64	Co M 0265 X Co T 8201	50.000	20.7	-
65	2015 V 65	Co C 671 X Co 94008	42.500	19.5	-
66	2015 V 66	Co C 671 X Co 94008	57.500	20.4	-
67	2015 V 67	Co M 0265 X Co T 8201	95.000	20.7	-
68	2015 V 68	Co M 0265 X Co T 8201	47.500	21.5	-
69	2015 V 69	Co M 0265 X Co T 8201	30.000	19.5	-
70	2015 V 70	Co M 0265 X Co T 8201	97.500	21.8	-
71	2015 V 71	Co M 0265 X Co T 8201	47.500	25.6	-
72	2015 V 72	Co M 0265 X Co T 8201	105.000	24.8	-
73	2015 V 73	Co 93009 GC	100.000	21.2	-
74	2015 V 74	Co 93009 GC	107.500	21.5	-
75	2015 V 75	Co 84070 GC	92.500	21.3	-
76	2015 V 76	89 V 74 GC	145.000	21.8	-
77	2015 V 77	89 V 74 GC	97.500	25.0	-
78	2015 V 78	Co 2000-10 PC	47.500	20.1	-
79	2015 V 79	Co 2000-10 PC	40.000	21.2	-

80	2015 V 80	Co 94012 PC	70.000	22.0	-
81	2015 V 81	Co 94012 PC	35.000	22.1	-
82	2015 V 82	Co 94012 PC	110.000	20.8	-
83	2015 V 83	Co 94012 PC	102.500	20.3	-
84	2015 V 84	Co 94012 PC	50.000	24.0	-
85	2015 V 85	Co LK8102 GC	85.000	21.6	-
86	2015 V 86	Co LK8102 GC	42.500	17.2	-
87	2015 V 87	Co 85002 PC	97.500	23.1	33.74
88	2015 V 88	Co 85002 PC	52.500	22.3	-
89	2015 V 89	Co 85002 PC	62.500	22.8	16.00
90	2015 V 90	Co 85002 PC	72.500	23.9	100.00
91	2015 V 91	Co 85002 PC	75.000	23.2	-
92	2015 V 92	Co 85002 PC	95.000	23.9	-
93	2015 V 93	Co 85002 PC	95.000	22.4	-
94	2015 V 94	Co 85002 PC	65.000	23.9	-
95	2015 V 95	Co 85002 PC	12.500	20.3	-
96	2015 V 96	Co 85002 PC	60.000	25.0	-
97	2015 V 97	Co 85002 PC	92.500	20.9	100.00
98	2015 V 98	Co 85002 PC	92.500	24.7	100.00
99	2015 V 99	Co 85002 PC	50.000	20.4	-
100	2015 V 100	Co 85002 PC	-	-	-
101	2015 V 101	ISH 100 X C 81615	125.000	19.7	-
102	2015 V 102	ISH 100 X C 81615	40.000	21.2	-
103	2015 V 103	ISH 100 X C 81615	70.000	18.8	-
104	2015 V 104	ISH 100 X C 81615	70.000	13.5	-
105	2015 V 105	ISH 100 X C 81615	115.000	24.2	-
106	2015 V 106	ISH 100 X C 81615	87.500	23.7	-
107	2015 V 107	ISH 100 X C 81615	55.000	18.6	-
108	2015 V 108	Co 94012 X Co 94008	82.500	16.4	-
109	2015 V 109	Co 94012 X Co 94008	97.500	19.2	-
110	2015 V 110	Co 94012 X Co 94008	62.500	22.8	-
111	2015 V 111	Co 94012 X Co 94008	67.500	18.7	-
112	2015 V 112	Co 94012 X Co 94008	110.000	19.7	-
113	2015 V 113	Co 94012 X Co 94008	102.500	19.3	-
114	2015 V 114	Co 88025 X Co C 8001	62.500	17.6	-
115	2015 V 115	Co 740 X Co 775	37.500	18.5	-
116	2015 V 116	Co 740 X Co775	50.000	19.0	-
117	2015 V 117	Co A 93082 X Co 94008	62.500	18.4	-
118	2015 V 118	Co A 93082 X Co 94008	85.000	15.6	-
119	2015 V 119	Co 8371 X Co Se 92423	120.000	15.5	-
120	2015 V 120	Co 8371 X Co Se 92423	95.000	21.1	-
121	2015 V 121	Co 8371 X Co Se 92423	115.000	16.5	-
122	2015 V 122	Co 8371 X Co Se 92423	90.000	16.8	-
123	2015 V 123	Co 8371 X Co Se 92423	72.500	19.3	-
124	2015 V 124	Co 8371 X Co Se 92423	80.000	19.2	100.00
125	2015 V 125	ISH 175 X CoV 92102	100.000	18.5	-
126	2015 V 126	ISH 175 X CoV 92102	92.500	21.2	-
127	2015 V 127	ISH 175 X CoV 92102	97.500	11.0	-
128	2015 V 128	ISH 175 X CoV 92102	102.500	21.4	-
129	2015 V 129	ISH 175 X CoV 92102	77.500	21.1	100.00
130	2015 V 130	ISH 175 X CoV 92102	95.000	20.6	-
131	2015 V 131	Co V 92102 GC	82.500	23.7	-
132	2015 V 132	Co V 92102 GC	82.500	19.8	-
133	2015 V 133	Co 90018 GC	97.500	19.9	-

134	2015 V 134	Co 90018 GC	77.500	20.0	06.45
135	2015 V 135	Co V 94101 GC	50.000	22.1	-
136	2015 V 136	Co 90018 GC	90.000	21.5	-
137	2015 V 137	Co 90018 GC	112.500	19.9	-
138	2015 V 138	Co V 94101 GC	47.500	12.3	-
139	2015 V 139	Co V 94101 GC	105.000	19.5	-
140	2015 V 140	Co V 94101 GC	52.500	18.0	-
141	2015 V 141	Co V 94101 GC	112.500	21.0	-
142	2015 V 142	Co V 94101 GC	50.000	18.1	-
143	2015 V 143	Co V 94101 GC	50.000	21.7	-
144	2015 V 144	Co V 94101 GC	25.000	20.8	-
145	2015 V 145	C 79218 X Co62174	80.000	16.3	-
146	2015 V 146	C 79218 X Co62174	95.000	19.4	-
147	2015 V 147	C 79218 X Co62174	75.000	13.7	-
148	2015 V 148	Co 8910 X Co775	95.000	22.3	-
149	2015 V 149	Co 8910 X Co775	55.000	18.8	-
150	2015 V 150	Co 8910 X Co775	82.500	18.7	-
151	2015 V 151	Co 92006 GC	110.000	23.1	-
152	2015 V 152	Co 92006 GC	85.000	19.8	-
153	2015 V 153	Co 92006 GC	55.000	15.0	-
154	2015 V 154	Co A 92081 X Co 86249	135.000	18.2	-
155	2015 V 155	Co 99006 X Co 775	97.500	21.0	-
156	2015 V 156	Co 99006 X Co 775	75.000	20.2	-
157	2015 V 157	Co 7424 GC	97.500	20.0	-
158	2015 V 158	Co V 94101 X MS 6847	72.500	19.3	-
159	2015 V 159	97 R 129 GC	135.000	19.1	-
160	2015 V 160	97 R 129 GC	80.000	19.6	-
161	2015 V 161	97 R 129 GC	70.000	23.8	-
162	2015 V 162	97 R 129 GC	90.000	18.1	-
163	2015 V 163	Co8371 PC	82.500	18.0	-
164	2015 V 164	Co8371 PC	90.000	19.9	-
165	2015 V 165	Co8371 PC	50.000	19.8	-
166	2015 V 166	Co8371 PC	20.000	19.0	-
167	2015 V 167	Co8371 PC	50.000	19.3	-
168	2015 V 168	Co 94012 PC	25.000	19.8	-
169	2015 V 169	Co 94012 PC	57.500	19.7	-
170	2015 V 170	Co8371 PC	62.500	22.1	-
171	2015 V 171	Co 94012 PC	60.000	22.0	-
172	2015 V 172	Co 90018 GC	120.000	18.1	-
173	2015 V 173	Co A 90081 X ISH 69	65.000	21.4	-
174	2015 V 174	Co V 89101 X Co T 8201	50.000	20.3	-
175	2015 V 175	Co V 89101 X Co T 8201	85.000	19.5	-
176	2015 V 176	Co V 89101 X Co T 8201	72.500	21.6	-
177	2015 V 177	Co V 89101 X Co T 8201	95.000	20.3	-
178	2015 V 178	Co 8371 X Co 775	100.000	17.9	-
179	2015 V 179	Co 8371 X Co 775	62.500	12.8	-
180	2015 V 180	97 R 129 GC	110.000	16.9	-
181	Co6907(C )	Co740 X Co 1287	120.833	19.5	-
182	Co7219(C )	Co 449 X Co658	64.167	21.5	-

Table 3: Performance of clones in Selection nursery (2015-16)

No of clones studied: 35+2

No of clones selected: Selections were not forwarded due to damage of clones in fire accident. The trial was ratooned.

S. No.	Clone	Parentage	NMC (000s/ha)	% Juice Sucrose at 10 <sup>th</sup> month	Length of millable cane (cm)	Diameter (cm)	Single Cane Weight (kg)
1	2014 V 2	Co C 8201 X ISH 229	80.625	17.94	251.3	2.62	1.13
2	2014 V 3	Co 8371 X Co S 510	120.000	14.76	230.0	2.89	1.50
3	2014 V 9	Co 8371 X Co S 510	96.250	11.33	216.7	3.35	1.75
4	2014 V 10	Co 8371 X Co S 510	98.125	15.19	213.3	2.40	1.50
5	2014 V 11	Co 6304 X Co A 7602	91.875	14.93	291.3	2.63	1.88
6	2014 V 12	Co 6304 X Co A 7602	56.850	16.80	255.0	2.62	0.90
7	2014 V 13	Co 6304 X Co A 7602	106.875	10.23	320.0	2.91	1.90
8	2014 V 17	Co 6304 X Co A 7602	62.500	12.46	256.3	2.88	1.58
9	2014 V 19	Co 8371 X Co 775	95.000	8.47	206.3	2.69	1.38
10	2014 V 21	Co 8371 X Co 775	74.375	9.25	270.0	3.60	1.88
11	2014 V 23	Co 8371 X Co 775	65.000	13.71	247.5	2.79	1.25
12	2014 V 24	Co 8371 X Co 775	48.125	12.41	273.3	3.09	1.23
13	2014 V 31	Co V 89101 X ISH 69	38.750	18.32	228.3	2.85	1.43
14	2014 V 33	Co V 89101 X ISH 69	71.250	11.96	251.7	3.07	1.63
15	2014 V 34	Co V 89101 X ISH 69	87.500	11.94	333.3	2.91	2.33
16	2014 V 35	Co V 89101 X ISH 69	92.500	14.56	213.8	2.97	1.65
17	2014 V 38	Co V 89101 X ISH 69	112.500	9.41	251.7	2.47	1.00
18	2014 V 39	MS 6847 X ISH 229	56.250	8.83	251.7	3.16	1.83
19	2014 V 45	Co Se 95423 GC	113.750	17.72	292.5	2.66	1.20
20	2014 V 52	Co Jn 80151 GC	88.125	13.23	277.5	2.83	1.70
21	2014 V 63	Co 85002 X 97 R 401	93.125	14.05	226.7	2.53	1.08
22	2014 V 65	Co 85002 X 97 R 401	88.125	11.00	278.8	2.35	1.13
23	2014 V 66	Co 8371 PC	93.125	13.13	292.3	2.94	1.93
24	2014 V 68	Co Or 05-546 GC	58.750	11.47	283.3	2.53	1.23
25	2014 V 71	Co V 89101 X Co A 7602	41.875	13.52	337.5	3.08	2.20
26	2014 V 73	Co V 89101 X Co A 7602	87.500	12.97	315.0	2.57	1.55
27	2014 V 80	ISH 139 GC	89.375	15.14	271.3	2.61	1.65
28	2014 V 81	Co V 89101 PC	110.625	11.15	265.0	2.66	1.15
29	2014 V 83	Co V 89101 PC	70.000	14.29	253.3	2.63	1.38
30	2014 V 84	Co V 89101 PC	119.325	16.55	250.0	2.43	1.25
31	2014 V 88	Co V 89101 PC	45.625	13.66	280.0	2.90	2.00
32	2014 V 90	Co V 89101 PC	85.000	13.10	325.0	2.95	1.83
33	2014 V 91	Co V 89101 PC	99.375	17.11	243.8	2.39	1.00
34	2014 V 92	Co 2000-10 PC	69.375	15.08	285.0	2.68	1.38
35	2014 V 97	Co V 89101 X Co A 7602	90.625	16.47	266.7	3.00	1.73
36	Co6907(C)	Co740 X Co 1287	106.875	14.57	290.0	2.46	1.15
37	Co7219(C)	Co 449 X Co658	125.417	11.57	327.5	2.43	1.38

